INFORMATION REPORT

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SUBJECT Production Methods, Operations, Deliveries, Bottlenecks at the Oberspreewerk

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SUPPLEMENT TO

[redacted]

1. The wire-drawing diamonds, which were previously used for wire production, had to be drilled with diamond points and be treated with diamond bort. This procedure was very time-consuming, sometimes requiring months to drill the wire-drawing diamonds. Moreover, there was always the danger of shattering the diamond being drilled at the last moment.

By means of the new oxygen-blast procedure, the danger of shattering is now considerably reduced, and the drilling time is substantially reduced. Under the old method, for example, the drilling of a conical hole required one to three hours. With the new procedure it requires from one-half to one minute. The drilling takes place in a small electric oven. The process can be observed through a small quartz window in the oven. The oven is brought to a temperature of 900° C; then the diamond is placed inside by means of tongs and is played upon from above and below simultaneously by a blast of oxygen from a nozzle one-tenth of a millimeter in diameter. (See sketch). The stream of oxygen is introduced only after the diamond is completely surrounded by a continuous stream of hydrogen. Within one half to one minute a tiny hole can be produced with a rim diameter of about 0.4 to 3 millimeters and a depth of 0.5 to 4 millimeters and having a highly polished surface.

On the whole, it is actually a matter of a new method of preliminary drilling, after which the actual drilling of the aperture follows according to the old method.

2. The Zeiss firm in Jena received the order to produce monthly 4,000 new diamonds of 1/5 to 1/4 carats, to be increased later to 6,000 diamonds monthly. The price is estimated at 50 Dutch guldens each, corresponding to the prices charged by the Philipps firm.

3. The following prices are charged for the types of tubes mentioned below from the production program of the OSW firm.

Types of tubes	a. Prices for the Russians	b. the Germans
6 SA 7 and 6 AC 7	23 DM	44 DM
6 V 6 and 6 AG 7	23	50
6 J 6	24	60
6 E 5 and LD 7	280	290

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Types of tubes	Prices for a. the Russians	b. the Germans
6 H 6 and LD 9	300 DM	330 DM
5 Z 5 and LD 11	200	250
6 L 6 and LD 12	200	250
6 Q 7 and 723 AB	400	600
AL 4	20	25

Prices for Russians Only

5 Z 4, 6 X 5, 6 J 5	10 DM
6 B 8, 6 F 7, 6 V 6, 6 H 8, 6 L 6, 25 L 6, 6 E 8, 6 SA 7 6 K 7, 6 SC 7, 6 SH 7, 6 AC 7, 6 E 5, 6 SK 7, 6 AF 7, 6 Q 7, 6 SN 7, 6 AH 7, 6 F 5, 6 SQ 7	20
6 A 8	15
6 K 8	3
6 C 5	2
6 H 6	11
6 J 7	12
25 Z 6	13
R 566	18
	15,000 (sic)

4. For the year 1949 the following raw material consumption is estimated:

Iron	180 tons
Copper	10 tons
Brass	25 tons
Bronze	15 tons
Nickel	18 tons
Aluminum	18 tons
Insulating materials	20 tons

5. Concerning the direct reparations deliveries, the OSW has to produce the following:

150 glow current-rectifiers for 200,000 volts

100 discharge tubes

10,000 stabilizers

1,000 Heissleiter

25,000 high-frequency pentodes

20,000 tubes of type 6 AG 7

500 impulse tetrodes

50 blue-light cathode ray tubes

6. The value of production in May amounted to the following:

Radio tubes 600,000 DM ; production quota 900,000 DM

Special tubes 400,000 DM; " " 500,000 DM

Tungsten and molybdenum wires 150,000 DM; production quota 150,000 DM

Other products 200,000 DM; production quota 200,000 DM

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During the same period, 500,000 DM were spent for experimental purposes. Of that amount, 350,000 DM were consumed for the completion of Russian projects and the remaining 150,000 DM for DWK jobs. Of the latter sum, 20,000 DM were set aside for experiments in the field of electron microscopy.

7. The amplification of electrical waves by semi-conductors - there is this effect in the use of Germanium crystal - is to be further developed by Dr. Brond. It is intended to overtake the American lead. (Transistors)

8. The DWK invested 200,000 DM in the OSW for the production of electron microscopes. Five of the already completed microscopes are to remain in the East Zone; of these, one is to remain in the OSW for further development, one in the former Kaiser-Wilhelm Institute in Berlin-Buch, one in the Berlin University and two others in medical clinics. Research projects which are to be carried out with these instruments must first be approved by the Russians. The projects are supervised by the DWK, which must also see to it that the results of the experiments are placed at the disposal of the Russians.

9. The former branch of the Lorenz firm in Leipzig is building at present several transmitters with an antenna input of 100 KW, which are to be installed in the East Zone and in satellite countries. In the OSW there is already a paid order for 50 transmitter tubes and accessories for these transmitters. The order is to be increased to 100 in the near future.

10. Hungary has ordered 600 X-ray tubes. Of this number, 300 are to be designated for industry and for medical purposes respectively.

11. The reject quota of 50% mentioned in a previous report was lowered to 12.5% as a result of the improvement of the pastes. The original deterioration of the production is traced back to impure raw materials.

It has come to light that the supplying firms are concerned above all in fulfilling the delivery quota, without consideration to the quality. Whereas formerly the delivered raw materials could be used without further scrutiny because their purity was guaranteed by the supplying firm, every delivery must be examined now.

12. The supply of low-grade materials was not only noted in the case of chemicals, but the nickel and copper anodes also proved to be impure. Rejects amounted to 60%. Nickel plate used in the production of tubes also had to be returned because the impurities were too great. In the month of May, 35 kg. of tungsten bars had to be purified and remelted since the tungstic acid delivered from the IG Bitterfeld contained considerable foreign admixtures. The tungsten wires produced from the impure material had such low tensile strength that drawing to small diameters was impossible. In other deliveries considerable deficiencies showed up as well. Therefore, the following firms were excluded from future deliveries to the SAG "Pribor";

Firma Ellinger and Geissler, Dorfhain in Saxony (a VEB); delivered tube bases were 50% rejects.

Firma "Marten" (SAG) Chemnitz; delivered pig iron castings were impure and contained bubbles.

Firma Richter, Rochlitz in Saxony; delivered sockets were 100% rejects.

Firma Mengel, Berlin, Niederschönhausen; delivered brass nuts were 75% rejects.

Firma Hössner, (no location given); delivered tube rivets were 100% rejects.

Firma Pallos, Berlin SO-36, Heidelbergstrasse; delivered cylinder screws were 50% rejects.

Firma Hermann and Erich R. Reichardt, Goldleistenfabrik, Berlin N 54, Brunnenstr.; delivered pinion gears were 50% rejects.

19. In spite of the lifting of the blockade, the delivery difficulties for goods from the West Zones still exist. Lacking above all are the following: FeN_2, FeP_2, Cr-Si-sheets, Nickel sheets, Nickel foil, W- and Mo-sheets, Armco steel, NCT sheets, Sicromal sheets, Hydrokollag used for blue light cathode ray tubes, barium acid, glycerine, formic acid, chromic acid, rare gases, rape seed oil, olive oil, vacuum pump oil, special measuring instruments, vacuum pumps of first quality.

14. It is known that some firms in the West Zones are prohibited to deliver certain products to the East Zone. Among these are the following:

Heraeus Vakuumschmelze in Frankfurt

Vereinigte Deutsche Nickelwerke in Schwerte/Ruhr

Badische Anilin-und Sodafabrik in Ludwigshafen/Rhein

Griesogen in Hanau has been forbidden to deliver rare gases, while Badische Anilin has been forbidden to deliver nickel powder.
The nickel powder, which is produced from nickel oxalate in the East Zone costs 25 DM/kg., while it can be procured from the Western Zones at a cost of 3.15 DM/kg. In the price comparison, the exchange rate of one West Mark = five East Marks was used as a basis.